

### **Amendments to the Specification:**

Please replace paragraph [0003] starting on page 1 with the following rewritten paragraph:

The MPEG-4 Fine-Granular Scalability (FGS) framework allows for different levels of compression for different parts of an image by using an adaptive quantization technique, referred to as Selective Enhancement. ~~Selective Enhancement techniques, are more fully disclosed in U.S. Patent Application Serial Number 60/217,827, entitled, "System And Method For Fine Granular Scalable Video With Selective Quality Enhancement," filed on July 12, 2000 and commonly assigned to the same assignee herein.~~ Utilizing Selective Enhancement techniques, designated areas of an image may achieve a higher quality level than non-designated areas of the image. More specially, the enhancement data layers of designated areas of an image are transmitted with a higher priority than enhancement data layers of non-designated image areas. ~~As disclosed in the referred to application,~~ The higher priority of a designated area is achieved by "shifting" the bit-lane of an image element, such as a pixel array or a plurality of pixel arrays, i.e., a macroblock, to a higher priority level. Consequently, an enhancement factor or shift factor is associated to each array or macroblock.

Please replace paragraph [0021] on page 4 with the following rewritten paragraph:

Figure 1 is representative of a conventional Fine Granular Scalability (FGS) video encoding system 100 employing selective enhancement technology. As illustrated, this system is composed of a base layer encoder 102 and an enhancement layer encoder 104. The base layer encoder 102 includes a DCT block, a quantization block and an entropy encoder block that generates part of the BL stream from the original video. The base layer encoder 102 also includes the motion estimation block that produces base layer and enhancement layer motion vectors (motion compensation information) from the original video. The base layer encoder 102 further includes an inverse quantization block, an inverse DCT block, motion-compensation block and frame-memory, which are utilized when computing the enhancement layer motion-compensated residual images. Original video signal 106 is digitally encoded and quantized by

base layer encoder 102 and produces a base layer signal (BL) 110 which contains sufficient information that is representative of a minimally acceptable video signal. Base layer signal 110 may also include the earlier described motion compensation information. ~~Motion compensation is well known in the art and need not be discussed herein.~~

Please replace paragraph [0022] starting on page 4 with the following rewritten paragraph:

Original video signal 120 is also provided to enhancement layer encoder 104 along with the digitized and quantized signal base layer signal 110. The enhancement layer encoder 104 includes a DCT residual image block for storing the residual images and motion-compensated residual images. The residual images are generated by a subtracter that subtracts the DCT block output from the input of quantization block. The motion-compensated residual images outputted directly from the DCT block. Enhancement layer encoder 104 determines a residual error as the difference between the original video signal and the quantized base layer signal 110.

Enhancement layer encoder 104 creates enhancement layer 150 containing information items, which when applied to transmitted BL layer signal 110 removes the errors of quantization and improves the original image quality. The number of information items within enhancement layer 150 that are transmitted depends on the bandwidth available. Hence, each information item (e.g., bit-plane) within enhancement layer 150 may not be transmitted during a frame. Consequently, those areas of a transmitted image that are transmitted first tend to have better quality than those transmitted latter.

Please replace paragraph [0029] on page 8 with the following rewritten paragraph:

Figure 3a illustrates an encoding system 260 utilizing a selective enhancement technology in accordance with the principles of the invention. In this illustrative embodiment of the invention, the system comprises a base layer encoder 102 and an enhancement layer encoder 104. The base layer encoder 102 includes a DCT block, a quantization block and an entropy encoder block that generates part of the BL stream from the original video. The base layer

encoder 102 also includes the motion estimation block that produces base layer and enhancement layer motion vectors (motion compensation information) from the original video. The base layer encoder 102 further includes an inverse quantization block, an inverse DCT block, motion-compensation block and frame-memory, which are utilized when computing the enhancement layer motion-compensated residual images. Original video signal 106 is digitally encoded and quantized by base layer encoder 102 and produces a base layer signal (BL) 110 which contains sufficient information that is representative of a minimally acceptable video signal. Base layer signal 110 may also include the earlier described motion compensation information. The selective enhancement block 108' includes processing in addition to the selective enhancement block 108 of Figure 1 to improve the efficiency of the transmission of video encoded data. As will be appreciated, additional processing contained in block 108' may be included in selective enhancement block 108 and may be performed upon completion of the processing of block 108 or concurrently therewith.